ABSTRACT OF THE DISCLOSURE

A semiconductor device in which electrodes of a plurality of semiconductor elements are bonded onto at least one of a plurality of electrode patterns on an insulator substrate, the other surface of the insulator substrate being bonded to a heat dissipating base. The upper surface of the heat dissipating base is covered with a member for cutting off the semiconductor elements from the outer environment. Terminals electrically connect the electrodes on said insulator substrate and the electrode placed outside the cutoff member. The material of the heat dissipating base has a linear expanding coefficient larger than that of the semiconductor element and smaller than three times that of the semiconductor element, and a thermal conductivity larger than 100 W/mK. The semiconductor elements are arranged on at least one electrode surface and in at least two regions divided by the other electrode surface on the insulator substrate.